

IN THE CLAIMS

Please amend the claims as follows:

1. (Currently Amended) A method for signal processing, wherein a sensor signal of an image sensor is provided as an input and wherein the input is reconstructed in a filter to establish an output for further processing, wherein the filter comprises at least one reconstruction-filter selected from the group consisting of: a luminance-reconstruction-filter, a red-green-blue-color-reconstruction-filter and a contour-reconstruction-filter, wherein ~~the input~~ wherein the sensor signal comprises a plurality of pixels, and a pixel provides a color value assigned to at least one of the colors red, green or blue,

characterized ~~by~~ in that the method comprises the steps of:

[[ - ]] applying the reconstruction-filter to an array of pixels of predetermined array size comprising a number of pixels of said plurality of pixels, wherein ~~at least one of the number of pixels is formed by a red-pixel assigned to the color of red, at least one of the number of pixels is formed by a blue-pixel assigned to the color of blue, and at least one of the number of pixels is formed by a green-pixel assigned to the color of green~~ ;

and

[[ - ]] weightening the red- and/or the blue-pixel by a green-parameter ;

[[ - ]] summarizing the pixels of the array into one output-pixel ;

and

[[ -]] centering the output-pixel in the array.

2. (Currently Amended) The method as claimed in claim 1,  
~~characterized by~~ wherein said method further comprises the steps of:  
\_\_\_\_\_ positioning a center-output-pixel of a second filter  
subsequent to a first filter in phase with the output-pixel, ~~in~~  
~~particular by~~ centering the center-output-pixel at the same center  
position of the array as the output-pixel.

3. (Previously Presented) The method as claimed in claim 1,  
characterized in that the reconstruction-filter is a luminance-  
reconstruction-filter and the pixels of the array are added  
together in one white-pixel being the output-pixel.

4. (Currently Amended) The method as claimed in claim 1,  
~~characterized by~~ wherein said method further comprises the step of:  
\_\_\_\_\_ choosing the green-parameter in dependence of a sensor  
matrix of the image sensor.

5. (Currently Amended) The method as claimed in claim 1,  
~~characterized by~~ wherein said method further comprises the step of:  
\_\_\_\_\_ choosing the green-parameter in dependence of an optical  
transfer of an optical system providing an image signal to the  
image sensor.

6. (Currently Amended) The method as claimed in claim 1,  
~~characterized by wherein said method further comprises the step of:~~  
\_\_\_\_\_applying the luminance-reconstruction-filter to an array-  
size of 2 x 2 or 4 x 4 or 6 x 6.

7. (Currently Amended) The method as claimed in claim 6,  
~~characterized by wherein said method further comprises:~~  
\_\_\_\_\_applying a low-pass-filter to an array size of 4 x 4 or 6  
x 6.

8. (Previously Presented) The method as claimed in claim 6,  
characterized in that the luminance-reconstruction-filter and the  
low-pass-filter are combined into one single filter.

9. (Currently Amended) The method as claimed in claim 1,  
~~characterized by wherein said method further comprises the step of:~~  
\_\_\_\_\_applying subsequent to the luminance-reconstruction-filter  
the color-reconstruction-filter wherein in particular the color-  
reconstruction-filter comprises a false-color-filter to eliminate  
false colors from the input.

10. (Currently Amended) The method as claimed in claim 1,  
~~characterized by wherein said method further comprises the step of:~~  
\_\_\_\_\_applying a post-filter to maintain in its output a phase  
to the output of a previous applied reconstruction-filter, in  
particular by applying the post-filter subsequent to a false-color-

filter to maintain a phase to a previous applying luminance-reconstruction-filter.

11. (Currently Amended) The method as claimed in claim 10,  
~~characterized by wherein said method further comprises the step of:~~  
\_\_\_\_\_applying subsequent to a false-color-filter a post-filter  
of 2 x 2 array-size, to position a center-output-pixel of a  
predetermined small array of green-pixels in phase with a white-  
pixel which is centered with respect to the same array as that to  
which a luminance-reconstruction-filter has been applied to.

12. (Currently Amended) The method as claimed in claim 1,  
~~characterized by wherein said method further comprises the step of:~~  
\_\_\_\_\_offering various luminance-reconstruction-filters for  
appliance, in particular by applying a luminance-reconstruction-  
filter to an array size of 2 x 2 in case of no or slight optical  
low pass filtering and/or applying a respective luminance-  
reconstruction-filter to an increased array-size of 4 x 4 or 6 x 6  
upon heavier optical low pass filtering.

13. (Currently Amended) The method as claimed in claim 1,  
~~characterized by wherein said method further comprises the step of:~~  
\_\_\_\_\_offering various color-reconstruction-filters for  
appliance, in particular applying a 3x3-color-reconstruction-filter  
in case of a 4 x 4-luminance-reconstruction-filter and/or applying

a 5 x 5-color-reconstruction-filter in case of a 6 x 6-luminance-reconstruction-filter.

14. (Currently Amended) An apparatus for signal processing,

~~which is in particular adapted to execute the method as claimed in claim 1,~~  
said apparatus comprising:

\_\_\_\_\_an image sensor for providing a sensor signal as an input;  
and

\_\_\_\_\_a filter for reconstructing the input to establish an output for further processing, wherein the filter comprises at least one reconstruction-filter selected from the group consisting of: a luminance-reconstruction-filter, a red-green-blue-color-reconstruction-filter and a contour-reconstruction-filter,

~~\_\_\_\_\_the input~~and wherein the sensor signal comprises a plurality of pixels, and a pixel provides a color value assigned to at least one of the colors red, green or blue,

~~characterized in that~~

~~\_\_\_\_\_wherein,~~ the reconstruction-filter is adapted to be applied to an array of pixels of predetermined array size comprising a number of pixels, wherein at least one of the number of pixels is formed by a red-pixel assigned to the color of red, at least one of the number of pixels is formed by a blue-pixel assigned to the color of blue, and at least one of the number of pixels is formed by a green-pixel assigned to the color of green,  
and wherein

~~the apparatus is further comprising~~comprises:

[[ - ]] means for weightening the red- and/or the blue-pixel with  
a green-parameter<sub>*i*</sub>.

[[ - ]] means for summarizing the pixels of the array into one  
output pixel<sub>*i*</sub> and

[[ - ]] means for centering the output pixel in the array.

15. (Currently Amended) A computer-readable medium having  
stored thereon a computer program product ~~storable on medium~~  
~~readable by a computing system, in particular a computing system of~~  
~~a camera, said computer program product~~ comprising a software code  
section which induces ~~the a~~ computing system to execute the method  
as claimed in claim 1 when the computer program product is executed  
on the computing system, ~~in particular when executed on a computing~~  
~~system of a camera.~~

16-17. (Cancelled).